

## **Amherst Board of Health Toxic Chemicals Regulation**

### **Section 1: Purpose**

Few of the 70,000 chemicals in commercial use today have been thoroughly examined for their potential risks to human health.<sup>1</sup> Further, scientific evidence points to the fact that many of the chemicals currently used in pesticides, cleaning agents and other types of industrial solvents, as well as those released in the process of chlorine bleaching, contain potentially harmful substances including endocrine disrupting chemicals and other toxins. Research indicates that regular exposure to these chemicals, over a long period of time, may be responsible for increases in the incidence of certain diseases. Included in this list are cancer, birth defects, nervous disorders, developmental and reproductive disorders, as well as the weakening of the immune system.

Since existing environmental regulations based on risk assessment are inadequate to adequately protect human and environmental health, a new approach is needed to address the use of these chemicals. When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically at this time.

Whenever possible, the Town has a duty to avoid exposing its citizens to potentially dangerous substances. This includes the use of cleaning solvents, paints, degreasers and pesticides that are free from toxins in and around town buildings. Alternative less toxic products have been shown to be affordable and effective in their uses.

The purposes of this regulation are:

- (1) To lessen the potential risk to the workers and citizens of Amherst by decreasing exposure to potentially harmful substances in town buildings. Such exposure results from the application of pesticides and cleaning solvents containing suspected harmful chemicals.
- (2) To phase out the use of chlorine bleached paper products where available, including but not limited to paper towels, toilet tissue, napkins, facial tissue, and coffee filters in all town buildings. (Note: the production of such products releases dioxins, which have been linked to cancer, reproductive disorders, and developmental problems in children.<sup>2</sup>)

These regulations are adopted pursuant to Massachusetts General Laws Chapter 111, Section 31.

## **Section 2: Regulation**

All products used in town buildings and on town properties shall be the least toxic that are available. They shall be free from organic solvents.

Pesticides shall not be used until alternative means of pest control have been tried. All pesticide use on town property shall be in accordance with the Massachusetts Pesticide Regulations, 333 CMR.

Paper products shall be recycled and free of chlorine.

In the event that a less toxic substance is not feasible, the Health Director may be contacted regarding a variance procedure (refer to Section 4a).

## **Section 3: Definitions**

“Toxic” – a toxic substance is any chemical or mixture that may be harmful to the environment and/or to human health if it is inhaled, swallowed, or absorbed through the skin. The most worrisome are those that are synthetic, or man-made.

“Least toxic” or “Nontoxic” – a substance that does not harm humans or the environment and is safe to use.

“Environment” – means physical conditions including land, air, water, minerals, flora, fauna, noise and objects of historic or aesthetic significance.

“Pesticides” – substances or mixture of substances that prevent, destroy, repel or mitigate pests, or defoliate, desiccate or regulate plants. These include herbicides, insecticides, fungicides, rodenticides.

“Chlorine-free” – paper products that employ chlorine-free technology (TCF) that uses hydrogen peroxide, ozone, and/ or oxygen bleaching systems that eliminate organochlorine emissions.

“Risk”- the probability of harm—such as injury, disease, death, or environmental damage— occurring under certain circumstances.

“Risk Assessment”- the process of estimating the harmful effects on human and environmental health of an exposure to a particular danger.

“Endocrine disrupters”- synthetic chemicals that have the ability to mimic or block hormones, cause unwelcome changes in hormone receptor sites, cause changes in the baseline production of hormones or replace hormones on the carrier proteins; found to produce adverse health consequences ranging from barely noticeable to very severe

“Town buildings” – include Fire stations, Police department, Bangs Community Center, Town Hall, Public Works, libraries, and public schools.

#### **Section 4: Procedure**

All town purchasers will ensure that::

- (1) All paper products are chlorine-free.
- (2) All products including cleaning, paint and degreasers are the least toxic chemical product currently available and are free from organic solvents and pesticides.
- (3) The Town will have one year from the approval of this regulation to come into full compliance with this regulation.

#### **Section 4a. Variance Procedure**

If a nontoxic replacement product cannot be used for any reason ( i.e. it is unavailable, too costly, or ineffective) a variance must be obtained from the Health Director or his/her designee.

#### **Section 5: Effective date**

These regulations shall take effect April 9, 2001.

<sup>1</sup> **Schettler, T., Solomon, G., Burns, P., and Valenti, M,** *Generations at Risk: How Environmental Toxins May Effect Reproductive Health in Massachusetts*, Greater Boston Physicians for Social Responsibility and Massachusetts Public Interest Research Group (MASSPIRG) Education Fund, February 2, 2001.

<sup>2</sup> World **Health Organization**, *Dioxins & their Effects on Human Health, Fact Sheet No. 225*. Jan. 30, 2001. [http://www.who.int/inf\\_fs/en/fact225.html](http://www.who.int/inf_fs/en/fact225.html)